

Ertekin M. Doksanaltı

THE ROMAN AND LATE ROMAN CERAMICS FROM THE HEROON OF HARBOR STREET AT KNIDOS

Knidos, located in the southwestern part of Anatolia, was an important pottery production and export center during the Hellenistic and Roman Empire periods. A context has been identified in the 'Heroon of Harbor Street', a late Roman workshop dating to the first half of the 7th century CE. The coin finds clearly indicate that this site was used during the 6th century CE. and abandoned with the mid-7th century CE. This evidence also makes it safe to say that the ceramic finds date to the early and the first half of the 7th century CE.

Knidos – Late Roman Pottery – *Spatheion* Amphora – Late Roman Amphorae – Roman Red Slip ware

1. Introduction¹

Knidos is located in the Caria region in the southwestern corner of Asia Minor. Knidos is a double sectioned city, as mentioned by Strabo (Strab. *Geog.* XIV. 2. 15, 656) situated on two opposing sides, one on the mainland and the other on the small island in front of it. The streets of Knidos run from north to south. The first street from the west was named Harbor Street because it starts at the Small Trireme Harbor. There is a building complex consisting of seven chambers roughly 45 m north of the beginning of Harbor Street in the south (fig. 1) (Doksanaltı et al. 2018: 19-35, fig. 5-13). This complex was built in the mid-4th century BCE as a row of shops on Harbor Street. During its long period of use from the 4th century BCE to the 7th century CE, there were some minor plan changes inside the complex. Among them, the fourth chamber from the south (Chamber 4) was originally used as a modest shop. It was converted into a magnificent Heroon during the period of the Roman Empire. The styles of its architectural blocks indicate that it dates to the reign of Severus. The available data show that Chamber 4 was used as a Heroon in the Roman imperial period with a *distylos in antis* plan and a Corinthian facade. The Heroon consists of two sections (fig. 2): a 5,25 x 5,51 m chamber and a rectangular niche (2,47 x 1,14 m) that was added behind the chamber and where the sarcophagus of the owner of the Heroon was located.

The Heroon was converted into a shop and/or workshop with some modifications in its plan during Late Antiquity (Chamber 4, fig. 2). The archaeological excavations did not definitely determine what type of shop or workshop it was used as. However, some evidence found at the site offers clues. Firstly, the oven in its southwestern corner produced high heat, which is important. Right next to it, a stand was built into the wall (fig. 2).

There is an interconnected underground channel system on the site. At four points on the channel, pit holes were prepared for amphoras. The amphoras were buried halfway or to the shoulders in the pits over the channel. Amphora no. 60 was found inside a pit in the northwestern corner in situ (fig. 2).

The high-temperature counter, the channel system and the amphoras pits on the channel indicate that this room was used for a heating or cooling activity. Amphoras filled with yellow paint and heavy iron clinkers indicate that it was used for some kind of manufacturing. Some parts of a bronze steelyard and coins that were found here also indicate commercial activity.

2. The Dating of the Context

Some significant evidence could be found for the conversion of Chamber 4 from a Heroon into a shop and/or workshop and its final period of use. Coin, ceramics and amphora findings indicate that it was converted into a shop/workshop in the first years of the 5th century CE, and that the rectangular niche with the sarcophagus was also converted into a storeroom during this period.

A bronze coin found in one of the amphora pits in the channel system and dated to the first quarter of the 5th century CE is a significant evidence of the conversion of the site.

¹ This study was conducted with the Decision of the Council of Ministers Number 2013/5387 on the date of 30.09.2013 and with the permission of the Knidos Presidency of Excavation in accordance with the Knidos Excavation and Research carried out on behalf of Selçuk University and the Ministry of Culture and Tourism. This study was supported by the projects of 'Knidos Excavation and Research I' with S. Ü. Nr. 14401067 carried out by the Selçuk University Scientific Research Projects Coordination Unit (S.Ü. BAP).

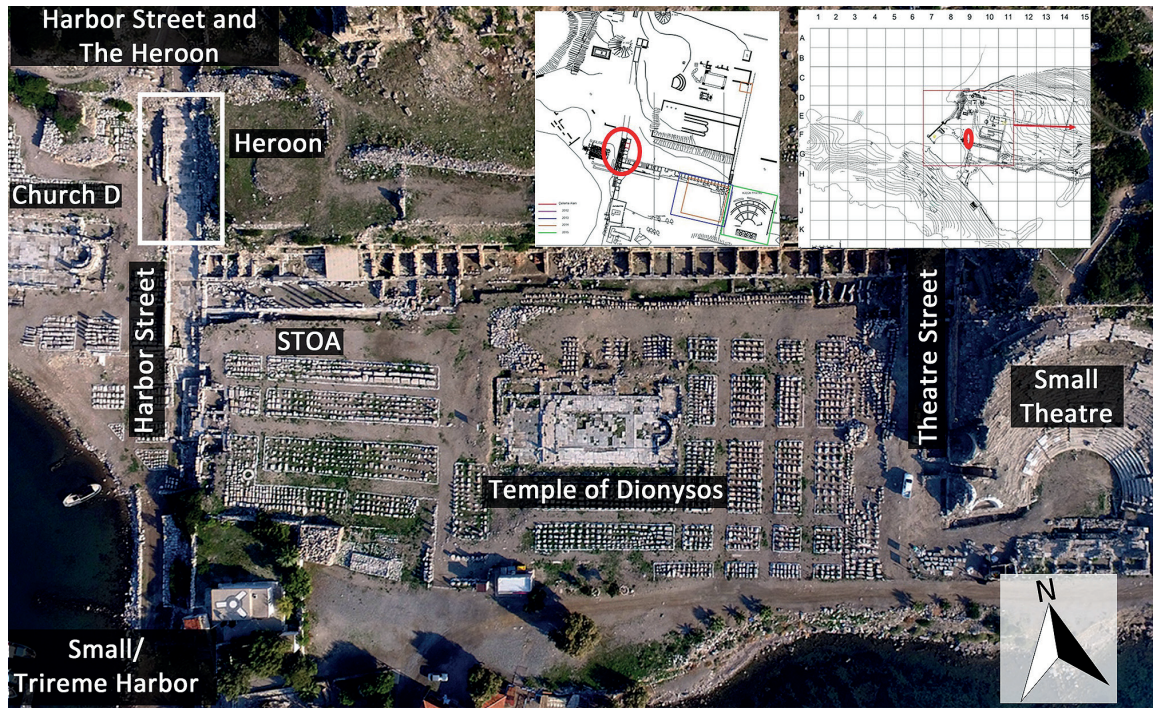


Fig. 1. Location of 'Heroon of Harbor Street'.

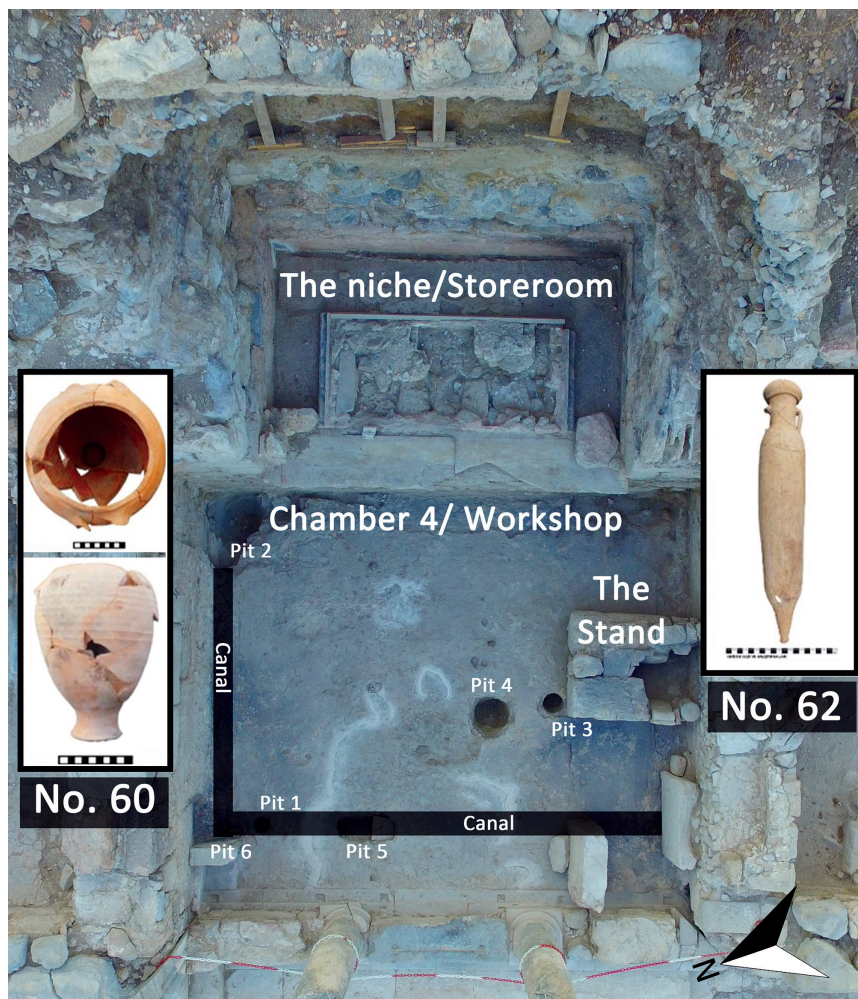


Fig. 2. Architectural arrangement of the Chamber 4/Workshop in Late Antiquity.

This is probably when the Heroon took on a new function and was converted into a shop/workshop.

During this period, a new wall was built in front of the niche with the sarcophagus. A new 2,47 x 1,14 m room was built behind Chamber 4. Amphoras were found in the corners of this new room. They indicate that it was used as a storeroom in the late antique era. Two bronze coins of Theodosius (379-95 CE) and one of Arcadius (395-401 CE) were found inside the mortared floor and under the base of the new wall of the storeroom. They indicate that the niche was converted into a storeroom in the early 5th century.

Evidence about the use of the new shop/workshop and its context can again be accurately determined by relating it to coinage. Bronze coins found inside the pits above the channel system and on the podium floor during excavations constitute evidence about the site's final period of use.

A bronze *follis* of the emperor Anastasius (498-518 CE), was found in one of the amphora pits in the northeastern corner of the chamber, and a bronze *follis* of the emperor Mauritius Tiberius (582-602 CE), was found above the counter in the southern wall. Another bronze coin was found on the corner of the counter. It was dated to the early 7th century CE according to its dimensions, weight and the features of the figure depicted on it. Similar findings were unearthed in other locations neighbouring Chamber 4, and the last coin finds were bronze *folles* of Emperor Phocas (602-610 CE) and Heraclius (610-641 CE).

The coin finds clearly indicate that this site was used during the 6th century CE and abandoned with the mid-7th century CE. This evidence also makes it safe to say that the ceramic findings date to the early and the first half of the 7th century CE.

3. Pottery

We have evidence for the conversion of the Heroon to a shop and/or a workshop in the 5th century CE and for its final period of use. The majority of the ceramic finds date to the final use of the chamber, in the early or mid-7th century CE, particularly by relating them to coins. The pottery found here directly relates to the final use of the structure and date to the 7th century CE. It is classified in four main categories: fine wares, cooking wares, plain wares and amphoras.

3.1. Fine Wares (fig. 3, 1-18)

Related to the site's final period of use phase, the fine wares belong to three categories: African Red Slip (ARS), Late Roman C (LRC) and Late Roman D (LRD). The fine ware finds include 18 sherds of wide and shallow plate forms. Of these, 15 date to the late 6th century and to early or the first half of the 7th century, and only three belong to the 5th-6th centuries CE. Late Roman C plates are the most common at 56% (10 sherds). African Red Slip plates follow with 33% (6 sherds), and Late Roman D plates have the lowest ratio at 11% (2 sherds). These ratios of imported red slip wares within the fine wares are quite close to those found in similar contexts in Knidos.

African Red Slip Wares (fig. 3, 1-6)

Rim and base sherds of three different forms of shallow plates were found and related to the site's final period of use. These sherds belonged to six different plates.

Nos. 1 and 2 are Hayes Form 104B (Hayes 1972: 160, 162, no. 15, fig. 30) or Mackensen Form 33.1, (Mackensen 1993: 346-48, 611, pl. 68). The Knidos examples date to 625-650 CE by their context.

No. 3 is a Hayes Form 105 (Hayes 1972: 166-69), large shallow plate. Rafti Island and Apollonia pieces (Hayes 1972: 169, nos. 8-10, fig. 32) with similar formal characteristics were dated to 640 CE.

Nos. 4 and 5 are Hayes Form 109 (Hayes 1972: 172, fig. 33), plain rim shallow plates.

Late Roman C Wares (fig. 3, 7-16)

Rim and base parts of two different deep and large plate forms were found and related to the site's final period of use. The sherds belonged to 10 different plates.

Nos. 7-9 are Hayes Form 3 (Hayes 1972: 333, 337), a large and deep plate/bowl.

Nos. 8 and 9 are Hayes Form 3, lower body and base sherds of large and deep plates dated to the 5th-6th centuries CE.

Nos. 10-16 are Hayes Form 10 deep plates/bowls.

Late Roman D (LRD) Wares (fig. 3, 17-18)

Rim sherds of a deep and large plate form was found and related to the site's final period of use. The sherds belong to two different plates.

Nos. 17 and 18 are Hayes Form 9, wide, flat, vertical or inward-oriented thick-edged deep plates/bowls. The Knidian plates are classified as Hayes Form 9A (Hayes 1972: 379-381, nos. 1-4, fig. 81) when they are shorter and have more vertical rim forms, inwardly convex thickened rim edges and as Hayes Form 9B (Hayes 1972: 379-381, nos. 5-12, figs. 81 and 82) when they have long and inwardly concave rims with thickened triangular edges.

3.2. Cooking Wares (figs. 3 and 4, 19-26)

Cooking wares related to the site's final period of use belong to three different groups: cooking pots (fig. 3, 19-21), casseroles (fig. 3, 22-23) and frying pans (fig. 4, 24-26). In these three groups, 8 pieces were found. All of them were locally produced and date to the early 7th century CE.

3.3. Plain Wares (fig. 4, 27-44)

Plain ware from the site's final period of use is classified in four groups: jugs (27 and 28), large bowls (29-35), basins/situlae (36-40) and lids (41-44).

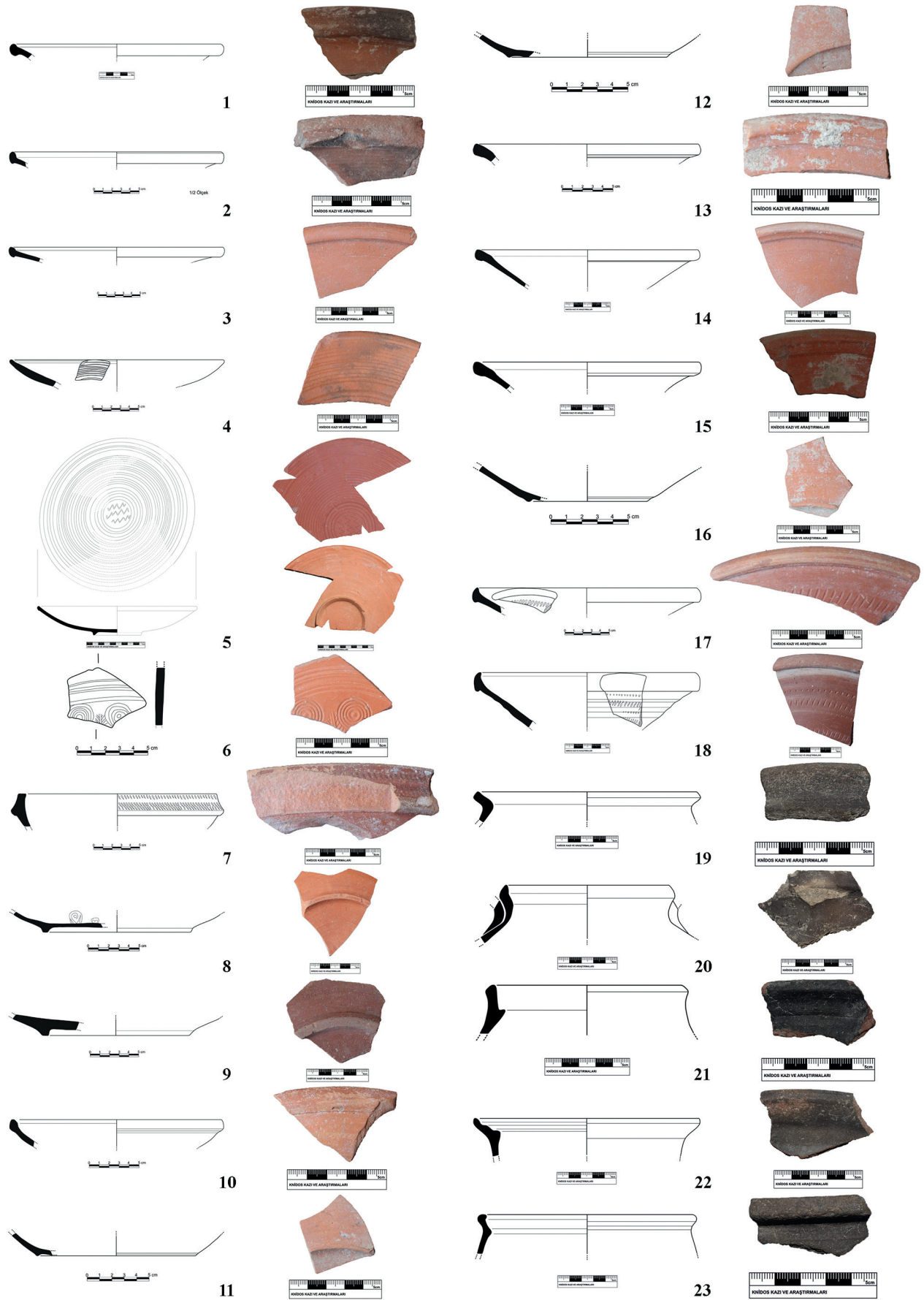


Fig. 3. Fine Wares (Nos 1-18) and Cooking Wares (Nos 19-23) from Chamber 4/Workshop.



Fig. 4. Cooking wares (23-26), plain wares (27-44), and amphoras (45 and 46) from Chamber 4/Workshop.

3.4. Amphoras (figs. 4-6, 45-69)

Parts of 25 different amphoras of four different amphora types were found on the site: LRA 1, LRA 2, LRA 3 and *Spatheion*.

The finding locations and settings of the LRA 1B, LRA 2B and 2C, LRA 3 and *Spatheion* 3 groups of amphoras indicate that they are directly related to the shop/workshop's final period of use. Particularly, the LRA 1B, LRA 2B and 2C amphoras were found together in pieces near the site's northern wall. These pieces have been partially connected.

LRA 1 (Carthage Late Amphora 1): LRA 1A and 1B (figs. 4-5, 45-51)

The LRA 1 A (45-47) group of amphoras were only found in small pieces and without any grouping. This findings are probably not directly related to the shop/workshop. They date to the 6th century CE.

Rim and body parts of the LRA 1 B (48-51) group of amphoras were found near the northern wall. Their formal characteristics (Opaît 2004: 9-10, LRA 1D; van Alfen 1996: 197, type V, figs. 7 and 8; Pieri 1998: 99, fig. 2, LRA 1B1; Reynolds and Pavlidis 2014: 452, fig. 6. 2-6) and context date them to the early 7th century CE.

LRA 2 (Carthage Late Amphora 2): LRA 2B and 2C (fig. 5, 52-59)

Rim, body and bottom parts of the LRA 2 group of amphoras were found near the northern wall. These parts are partially connected. The remaining broken body and rim sherds indicate there were five or six LRA 2 amphoras on the site during its final period of use.

Six amphoras of the LRA 2B (52-58) group were found. This form is classified as LRA 2B by Pieri (Pieri 1998: 100, fig. 3 middle) and is dated to the mid-6th and 7th centuries CE (Pieri 1998: 100; Bonifay and Pieri 1995: 110, fig. 8, no. 55; Opaît 2004: 11; Reynolds and Pavlidis 2014: 452, figs. 7 and 8; Sazanov 2000: 138, fig. 6. 7-8). But LRA 2B amphoras of this layer that are directly linked to the shop/workshop date to the early 7th century CE according to their formal characteristics (Bass and van Doornick 1982: 157-160, CA13-CA21, fig. 8. nos. 4-6; Opaît 2004: 126, pl. 6.7) and context.

An amphora of the LRA 2C (59) group was found. It has an externally everted, rounded rim with a long neck. This form is classified as LRA 2C (Pieri 2005: 88, pl. 27) by Pieri and dates to the 7th century CE (Pieri 1998: 100, fig. 3 right; Pieri 2005: 88).

LRA 3 (Carthage Late Amphora 3) or related (fig. 5, 60)

A single amphora of LRA 3 or related group was found in-situ in the pit hole in the northwestern corner above the

shop/workshop's underground channel system (fig. 2-pit 1). LRA 3 amphoras have a wide range of use. They became popular in the late 5th and 6th centuries and disappeared by the end of the 7th century (Hayes 1992: 63). Those with shorter, wider necks and massive (solid) foot bases were identified as a sub-type of Type 3C by Hayes as final examples of the series (Hayes 1992: 104, deposit 30, no. 178, fig 48). Their formal characteristics and similar examples date the Knidian amphoras to the early 7th century CE.

Spatheion (figs. 5-6, 61-66)

Parts of the rim, and body and bottom pieces of the *Spatheion* group of amphoras were found near the western wall, and are unlike other amphora groups found on the site. They are partially connected. It can be suggested that three or four *Spatheion* amphoras stood near the western wall. One of the other two *Spatheion* groups of amphoras (62) was found inside the stand (fig. 2), and the other (64) was found in pieces on the floor near the oven. The remaining broken body and rim pieces indicate that probably at least six *Spatheion* amphoras stood on the site during its final period of use.

All the *Spatheion* amphoras found in the site are classified as miniature *Spatheia* (Riley 1979: 226-227, LR Amphora 8a, fig 92; Hayes 1992: 67, type 14; Bonifay 2004: 127, *Spatheion* 3, Amphora Type 33, fig. 69) with heights of 40-50 cm and 6-8,5 cm body diameters. In addition to the short length and thickened externally convex rims of the majority of Knidian examples (61-65), there are examples of Bonifay's *Spatheion* 3 variant C (Bonifay 2004: 127, fig. 69 C.1, 4) group. Only one example (66) with its grooved body form was classified in Bonifay's *Spatheion* 3 variant D (Bonifay 2004: 127, fig. 69 D.1-2) group. Although the *Spatheion* 3 variant C group was dated to the late 7th century CE by Bonifay (2004: 129), the Knidian amphoras should be dated to the second quarter of the 7th century CE by their context.

Yellow paint was found inside three of the amphoras (62, 64-65) found here. Chemical analysis has shown that this yellow paint is a mixture of 52% sulfur and 46,5% iron element. And this mixture is pyrite (a kind of sulfur oxide). Pyrite is an iron sulfide with a yellow metallic luster and can be found as ore or concentrate. In antiquity, this element was used to obtain high heat or to light a fire. It has not been definitely determined which materials the *Spatheion* amphoras were used to transport (Peacock and Williams 1986: 203). However, they are thought to have been used to transport wine. Olive seeds and fish remains have been recently found in some amphoras, which indicate that this type was used to transport different materials (Keay 1984: 215; Bonifay 2004: 129, 474; Modrijan 2011: 143). In this regard, the Knidian examples are important. Knidos examples may show that *Spatheion* amphoras were also used in sulfur oxide transport.

Ertekin M. Doksanalti

Selçuk University, Faculty of Letters, Dep. of Archaeology
ertekin96@selcuk.edu.tr



Fig. 5. Amphoras from Chamber 4/Workshop: LRA 2B and 2C (52-59), LRA 3 (60), and *Spatheion* (62 and 63).

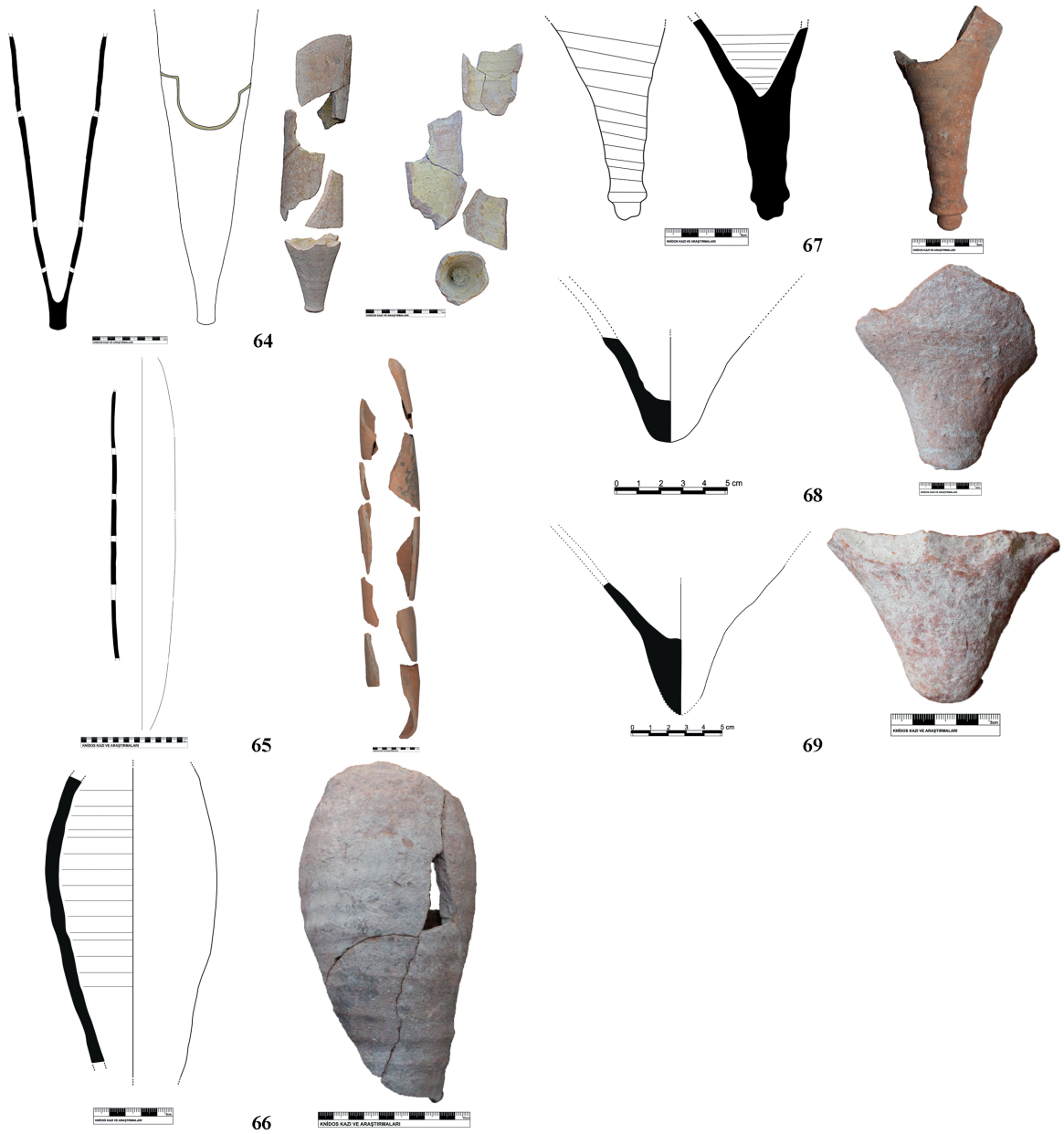


Fig. 6. Spatheion from Chamber 4/Workshop (64 and 66).

Bibliography

- Alfen, P. G. van 1996. New light on the 7th-c. Yassi Ada Shipwreck: Capacities and Standard Sizes of LRA 1 Amphoras. *Journal of Roman Archaeology* 9, 210-213.
- Bass, G. F. and van Doorninck, H. 1982. *Yassi Ada, Volume I. A Seventh-Century Byzantine Shipwreck*. College Station, Texas A&M University Press.
- Bonifay, M. and Piéri, D. 1995. Amphores du Ve au VIIe s. à Marseille: nouvelles données sur la typologie et le contenu. *Journal of Roman Archaeology* 8, 94-120.
- Bonifay, M. 2004. *Etudes sur la céramique romaine tardive d'Afrique* (BAR International Series 1301). Oxford, Archaeopress.
- Doksanaltı, E. M., Karaoğlu, İ., Aslan, E., Mimiroğlu, İ. M., Erdoğan, L. U. and Tozluca, D. O. 2018. In A. Özme (ed.), 39. *Kazı Sonuçları Toplantısı*, Bursa 22-26 Mayıs 2017, vol. 2, 15-43. Bursa, T.C. Kültür ve Turizm Bakanlığı ve Müzeler Genel Müdürlüğü.
- Hayes, J. W. 1972. *Late Roman Pottery*. London, British School at Rome.
- Hayes, J. W. 1992. *Excavations at Saraçhane in Istanbul. The Pottery*, Vol. 2. Princeton, Princeton Univ. Press.

- Keay, S. J. 1984. *Late Roman Amphorae in the Western Mediterranean. A Typology and Economic Study: the Catalan Evidence* (BAR Int. Series 196). Oxford, B.A.R.
- Mackensen, M. 1993. *Die spätantiken Sigillata- und Lampentöpfereien von el Mahrine (Nordtunesien)*. München, C. H. Beck.
- Modrijan, Z. 2011. Pottery. In Z. Modrijan and T. Milavec (eds.), *Late Antique fortified settlement Tonovcov grad near Kobarid: finds* (Opera Instituti archaeologici Sloveniae 23): 121- 221. Ljubljana, Založba ZRC.
- Opaiț, A. 2004. *Local and Imported Ceramics in the Roman Province of Scythia (4th- 6th centuries AD): aspects of economic life in the province of Scythia* (BAR Int. Series 1274). Oxford, Archaeopress.
- Peacock, D. P. S. and Williams, D. F. 1986. *Amphorae and the Roman economy: an introductory guide*. New York; London, Longman.
- Pieri, D. 1998. Les Importations d' Amphores Orientales en Gaule Méridionale durant l' Antiquité Tardive et le Haut-Moyen Age (IV-VII siècles après J.-C.). Typologie, chronologie et contenu. In *SFECAG, Actes du Congrès d'Istres* (21-24 Mai 1998), 97-106. Marseille, SFECAG.
- Pieri, D. 2005. *Le Commerce du vin Oriental à l'époque Byzantine (V^e-VII^e siècles). Le témoignage des amphores en Gaule*. Beyrouth, Institut français du Proche-Orient.
- Reynolds, P. and Pavlidis, E. 2014. Nicopolis (Epirus Vetus): an early 7th century pottery assemblage from the 'Bishop's House' (Greece). In N. Poulou-Papadimitriou, E. Nodarou and V. Kilikoglou (eds.), *LRCW4. Late Roman Coarse Wares, Cooking Wares and Amphorae in the Mediterranean. Archaeology and archaeometry. The Mediterranean: a market without frontiers* (BAR Int. Series 2616): 451- 467. Oxford, Archaeopress.
- Riley, J. A. 1979. *Excavations at Sidi Khrebish Benghazi (Berenice)*, Vol. II. Tripoli : Socialist People's Libyan Arab Jamahiriya, Secretariat of Education, Dep. of Antiquities.
- Sazanov, A. 2000. Les Ensembles Clos de Chersonese de la fin du VI^e- troisième quart du VII^e siècles: La chronologie de la céramique. In M. Kazanski and V. Soupault (eds.), *Les Sites Archéologiques en Crimée et au Caucase Durant l'Antiquité Tardive et le Haut Moyen age*, 123-149. Leiden, Brill.
- Williams, C. K. and Zervos, O. H. 1983. Corinth, 1982: East of the Theater. *Hesperia* 52, 1-47.
- Strabo, *Geography*, Volume V: Books 10-12 (Translated by H. L. Jones). (Loeb Classical Library 211). Cambridge MA, Harvard University Press, 1928.2